Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

- 1. (currently amended) A data mining system comprising:
- a client; and

a service broker configured to include an interface to receive a consultation request from the client through a computer network,

wherein the service broker forwards the consultation request to a Neugent to invoke a consultation of the Neugent, and forwards to the client through the computer network a result object returned by the Neugent.

- 2. (original) The system of claim 1, wherein the consultation request includes data for consulting the Neugent.
- 3. (original) The system of claim 2, wherein the Neugent performs a predictive analysis of the data included in the consultation request.
- 4. (original) The system of claim 1, wherein the consultation request includes identification of a source of data for consulting the Neugent.
- 5. (original) The system of claim 4, wherein the Neugent performs a predictive analysis of input data obtained from the source identified in the consultation request.

- 6. (original) The system of claim 1, wherein the service broker receives through the interface a training request from the client, the training request including training data, and forwards the training request including the training data to the Neugent to invoke training of the Neugent with the training data.
- 7. (original) The system of claim 6, wherein the training request includes a parameter specifying a ratio to split the training data between training the Neugent and testing the Neugent.
- 8. (original) The system of claim 6, wherein the service broker forwards to the client a training result object returned by the Neugent after training of the Neugent.
- 9. (original) The system of claim 1, wherein the Neugent groups training data patterns into clusters, each cluster corresponding to a group of similar data patterns, and predicts a probability of membership of an input pattern to a selected group.
- 10. (original) The system of claim 1, wherein the Neugent groups training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns, and predicts a probability of membership of an input non-numeric pattern to a selected group.
- 11. (original) The system of claim 1, wherein the Neugent forms a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns, and determining for each cluster probabilities of transition from the

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cluster to each of the other clusters, and predicts a probability of an event occurring by applying an input pattern to the cluster model.

- 12. (original) The system of claim 1, wherein the Neugent forms an input-output model associated with a set of training data patterns, and predicts an output value by applying the model to an input pattern.
- 13. (original) The system of claim 1, wherein the Neugent forms rules associated with corresponding relationships in a set of training data patterns, and predicts an outcome by applying the rules to an input pattern.
 - 14. (original) The system of claim 1, wherein the Neugent includes a functional-link net.
 - 15. (original) The system of claim 1, wherein the service broker is a remote server.
- 16. (original) The system of claim 15, wherein the consultation request includes an Extended Markup Language document.
 - 17. (original) The system of claim 15, wherein the Neugent is server-side.
- 18. (currently amended) A method for providing to a remote client machine a service to consult a Neugent, comprising:

receiving a consultation request from the remote client machine through a computer

network;

forwarding the consultation request to the Neugent to invoke a consultation of the Neugent; and

forwarding to the remote client machine through the computer network a result object returned by the Neugent.

- 19. (original) A computer system, comprising:
- a processor; and
- a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method of claim 18.
- 20. (original) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method of claim 18.
- 21. (original) A computer data signal embodied in a transmission medium which embodies instructions executable by a computer to perform the method of claim 18.
- 22. (currently amended) A method for providing to a remote client machine a service to train a Neugent, comprising:

receiving a train request from the remote client machine through a computer network; forwarding the train request to the Neugent to invoke training of the Neugent; and forwarding to the remote client machine through the computer network a training result object returned by the Neugent.

- 23. (original) A computer system, comprising:
- a processor; and
- a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to perform the method of claim 22.
- 24. (original) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method of claim 22.
- 25. (original) A computer data signal embodied in a transmission medium which embodies instructions executable by a computer to perform the method of claim 22.